

Page Application Overview

How to operate them

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The IRM system supports a suite of page applications that can be operated either via "Little Console" hardware or indirectly via a "Page G" user interface running on any of several platforms. This note will describe how to operate page applications in general using a Little Console. An individual platform's implementation of Page G support may vary.

Little Console hardware consists of the 16 line by 32 character alphanumeric display, a keyboard, a knob, and a set of pushbuttons with indicator lights. The display screen shows only capital letters. It has a cursor whose position is indicated by causing the character at that position to toggle using inverse video about 4 Hz. The position of the cursor is changed when displayable characters are typed on the keyboard, or by use of the arrow keys. Typing the Home key places the cursor at the start of the first line. Typing the Return key moves the cursor to the beginning of the current line.

The keyboard typing mode is always overstrike; there is no insertion mode option. Any displayable character typed on the keyboard replaces the character at the cursor position, and the cursor moves one character to the right. If the current character position is the rightmost one of a line, the cursor is moved to the start of the next line. (From the end of the last line, it moves to the start of the first line.) In summary, the relationship of the keyboard to the screen simply provides the ability to edit what is displayed, using overstrike mode.

To cause some control action, one commonly positions the cursor and presses the "keyboard interrupt" key. On the Little Console keyboard, the Escape key may be used for this "Do it!" button, or as we would now call it, the mouse button. The action that results often depends upon the cursor position. It is common to first use the keyboard to arrange field(s) on the screen to have the proper input values before the mouse click. Learning how to operate a specific page application requires learning what mouse click actions are possible.

Characters typed on the keyboard are displayed in inverse video to acknowledge user input. When field values are displayed by the page application, they are usually not displayed in this way. Also, when the page application reads from a field on the screen, any inverse video characters that the user may have entered in that field are cleared to normal characters.

Several built-in control actions are included for any page application. A mouse click on the top line in the page title field—from the 3rd through the 18th character position—causes the contents of the current page to be printed out the serial port. A mouse click in the Home (upper-left) position causes the page to switch to the index page. If it is already on the index page, it toggles to/from the second index page. A mouse click in the second character position of the top line causes the page to switch to the page indicated by the character in the Home position. A mouse click on the bottom display line is interpreted as an action to display 8 bytes of data at the indicated address on the first part of that line. If the cursor is at the start of that line, the 8-byte display is disabled. In summary, the top and bottom lines have special uses. The top line supports page switching and serial port printing, with the date and time displayed at the right. The bottom line can display 8 bytes of local memory.

The Index page provides a listing of the individual page titles. Each is preceded by that page's indicator character. There are 32 possible pages, using the characters 0–9, A–V. Page 0 is the Index page. To invoke a page application, position the cursor in the Home position, type the page character, and click. Each page is associated with a page application. To see the list of program names for each page whose title is listed on the index page, press the Hex

pushbutton. Besides the list of program names, each of which is an 8-character name beginning with PAGE, the current system code version date is shown. To change the page program associated with a specific page, first display the Index page that includes that specific page, then type over the program name to form the new program name. Click with the cursor positioned immediately following the last of the 8 program name characters. If a valid page program is not resident in the node's memory file system with the name shown, or if the name is invalid, a minus sign is displayed immediately following the page character. (In place of a name, an 8-character hex address may be used, pointing to the location in memory of the page application code, but this method is seldom used anymore.) One can also invoke a page application by placing the cursor at any character position on the Index page line corresponding to that page application, and clicking. (Note that the exception to this is the single character position following the program name.)